Division 3. Air Resources Board

Chapter 1. Motor Vehicle Pollution Control Devices

Article 2. Approval of Motor Vehicle Pollution Control Devices (New Vehicles)

§ 1968. Malfunction and Diagnostic System for 1988 and Subsequent Model Year Passenger Cars, Light-Duty Trucks, and Medium-Duty Vehicles with Three-Way Catalyst Systems and Feedback Control.

(a) All 1988 and subsequent model year passenger cars, light-duty trucks, and medium-duty vehicles equipped with a three-way catalyst system and feedback control shall be equipped with a means of informing the vehicle operator of the malfunction of computer-sensed emission-related components, and of the on-board computer processor, and of the malfunction of the emission-related functioning of the fuel metering device and EGR system on vehicles so equipped, and which provides for on-board diagnosis of the likely area of the malfunction without the aid of any external device. The system shall include a means of informing the vehicle operator, upon initiation of engine starting, that it is functioning properly. No malfunction and diagnostic system shall be required for malfunctions which would significantly impair vehicle driveability or prevent engine starting.

(b) This section shall be implemented as specified in this subsection or by any means determined by the executive officer to meet the requirements of this section:

The vehicles shall be equipped with a malfunction indicator light and an on-board self-diagnostic system. The on-board computer processor shall interrogate input parameters from computer-sensed emission-related components and shall also interrogate the functioning of the fuel metering device and of the EGR system on vehicles so equipped. Upon detection of a malfunction of any such component, device, or system, the computer processor shall cause the malfunction indicator light to illuminate. An on-board computer processor malfunction shall also cause the malfunction indicator light to illuminate. In the case of any such component, device or system whose malfunction would significantly impair vehicle driveability or prevent engine starting, no malfunction indication or diagnostic code shall be required. The indicator light shall also illuminate in the engine-run key position before engine cranking to indicate that the malfunction indicator light is functioning. The self-diagnostic system shall provide an on-board means of identifying, without the aid of any external device, the likely area responsible for the detected malfunction when the vehicle is serviced. The malfunction indicator light shall be located on the instrument panel and shall when illuminated, display the phrase "Check Engine" or "Service Engine Soon" or may display such other phrase determined by the executive officer to be likely to cause a vehicle owner to seek corrective action.

- (c) For purposes of this section:
- (1) A "computer-sensed emissions-related component of the three-way catalyst emission control system" means a component which provides emission control system input to the on-board computer processor.
- (2) "Malfunction" means the partial or total failure of one or more computer-sensed emission-related components or the on-board computer processor, or of the emission-related functioning of a fuel metering device or EGR system to a degree which would likely cause the emissions of an average certification vehicle with the failure or failures, individually or in combination, to exceed the emissions standards applicable pursuant to Subchapter 1 (commencing with Section 1900), Chapter 3 of Title 13.
- (d) The executive officer shall grant an extension for compliance with the requirements of this section with respect to a specific vehicle model or engine family if a manufacturer demonstrates that it cannot modify a present electronic control system by the 1988 model year because major design system changes not consistent with the manufacturer's projected changeover schedule would be needed to comply with the provisions of this regulation. The period of extension shall not exceed that necessary to enable modification of the electronic system in accordance with the manufacturer's projected changeover schedule or three years, whichever first occurs. Any manufacturer requesting an extension shall, no later than July 1, 1986, submit to the executive officer of the state board an application setting forth the required demonstration and specifying the period for which the extension is requested.

NOTE: Authority cited: Sections 39600, 39601 and 43013, Health and Safety Code. Reference: Sections 39002, 39003, 43000, 43013, 43100, 43101, 43102, 43104, 43105 and 43204, Health and Safety Code.

REFERENCE